M-178 AI-4

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: August 26, 1981

Forwarded to:

Sabine Towing and Transportation Co. Ross, Griggs, and Harrison, ESQS. Two Allen Center Houston, Texas 77002

Attn: Mr. W. Garney Griggs, ESQ.

SAFETY RECOMMENDATION(S)

M - 81 - 77

About 1410 e.s.t., on January 19, 1981, the outbound loaded U. S. flag tankship S.S. CONCHO grounded near the middle of the channel while on the range of Constable Hook Reach at the eastern end of Kill Van Kull in Upper New York Harbor. As a result, the portside bottom plating was extensively damaged when the CONCHO grounded and about 100,000 gallons of crude oil entered the water. No one was injured. Estimated cost of repair for the vessel was \$1,300,000, and the estimated cost of the oil spill cleanup to restore the environment was \$280,000.1/

While the vessel's preparations for getting underway were generally satisfactory the Safety Board believes that there were some less than professional actions which directly contributed to the accident. The third mate, who was assigned the duty of testing the vessel's navigation equipment, did not test or turn on the recording device for the echo sounder; advise the master that it was not operating; test the course recorder since it was reported to be inoperative; turn on the echo sounder; and make log entries that would have alerted other watch standers about the equipment's condition. The third mate's actions are not surprising since he had only recently graduated from school (he had been onboard for only 2 months). However, he was a licensed deck officer and should have been concerned with the safety and navigation of the vessel. Accordingly, he should also have checked whether there was sufficient depth of water to accommodate the vessel and informed the master if he had been in doubt.

The third mate did not calculate or request information related to the state of the tide, nor did he check the navigational charts, despite the fact that he was the watch officer when the CONCHO got underway. Apparently, these actions were predicated on the expected presence of both the master and a pilot on the vessel's bridge and the fact that there were no standing orders or other instructions from the master telling him what was expected. The master confirmed that there were no written directions outlining the duties on board the CONCHO.

^{1/} For more detailed information read, "Marine Accident Report - U.S. Tankship S.S. CONCHO Grounding Constable Hook Reach of Kill Van Kull Upper New York Harbor, January 19, 1981" (NTSB-MAR-81-11).

In preparation for the voyage, the second mate laid out National Oceanic and Atmospheric Administration (NOAA) Chart No. 12333, dated and corrected to reflect the changes contained in Notice to Mariners (NM) No. 38/80. Although the chart is not the most recent chart of the area, the NM correction provided current depth of water information for Constable Hook Reach. The second mate acknowledged his responsibilities to provide tidal and other navigational information; however, he did not calculate the information, made no comparisons with the charted information, and did not apprise the master of necessary navigational data regarding the depth of water available. Apparently, the second mate, who had been on board the CONCHO for about 3 months, had never carried out his responsibilities and had never been asked to do so. Had the second or third mate provided the master with the correct depth of water information, this accident may have been avoided.

The CONCHO departed Constable Hook with a maximum draft of 35 feet 5 inches. The appropriate chart lists the controlling depth as 34 feet 5 inches at mean low water (MLW) in the area where the CONCHO was navigating. The Tide Table 1981 prediction for the area was a depth of water 12 inches lower than MLW. Thus, the CONCHO was maneuvering in an area where its draft was 24 inches greater than the predicted water depth available. Therefore, the Safety Board concludes that the CONCHO was subject to grounding throughout the channel transit.

The master computed the tidal state and apprised the sea pilot of the vessel's draft and that the tidal conditions were a foot below MLW; however, he did not discuss those facts with the docking pilot who was conning the vessel. The master also failed to examine the navigational charts to determine the depth of water available in the channel or to require the information from the navigational officer, the second mate, or either pilot. He thereby deprived himself of the basic essential knowledge that his vessel's maximum draft of 35 feet 5 inches was 24 inches deeper than the predicted maximum available water depth in a channel known to be prone to shoaling before any allowance for channel clearance, squat, etc., were made. The information was at hand and readily available. U.S. Army Corps of Engineers Public Notice No. 10540 indicated that vessels' drafts are restricted to about 31 feet at MLW after considering channel clearance, squat, and trim. The Safety Board was not able to determine why the master failed to consider these factors; however, we believe that his actions were not prudent in the safe handling of his vessel.

Therefore, the National Transportation Safety Board recommends that the Sabine Towing and Transportation Company:

Develop and issue an operating manual for the CONCHO which includes a clear delineation of each officer's responsibilities, the intended method of vessel operation, and guidance to the master in preparing his standing orders. (Class II, Priority Action) (M-81-77)

DRIVER, Vice Chairman, and McADAMS and GOLDMAN, Members, concurred in these recommendations. KING, Chairman, and BURSLEY, Member, did not participate.

James B. King Chairman